

**RF performance**

	Ka-Band GV-74 Series	
F/D	0.8	
Operating frequency	TX : 29.25 – 30.00 GHz RX : 18.30 – 20.20 GHz	
Gain (± 0.3 dBi)	TX : 45.2 dBi @ 30.00 GHz RX : 42.1 dBi @ 20.20 GHz	
3 dB beamwidth	TX : 0.50° @ 30.00 GHz RX : 0.62° @ 20.20 GHz	
Sidelobe Envelope, TX Co-Pol dBi		
29-25logθ dBi	$100\lambda/D \leq \theta \leq 7^\circ$	
8 dBi	$7^\circ < \theta \leq 9.2^\circ$	
32-25logθ dBi	$9.2^\circ < \theta \leq 48^\circ$	
-10 dBi	$48^\circ < \theta \leq 180^\circ$	
Antenna Cross-Polarization within 1dB b/w	TX : > 25 dB RX : > 23 dB	
VSWR	1.3 : 1 Max.	
Certification	Eutelsat	

**Mechanical performance**

Material	Steel
Antenna Optics	One-piece offset feed prime focus
Mount Type	Elevation over azimuth
Elevation Adjustment Range	0°- 90° continuous fine adjustment; fine adjustment accuracy $\leq$ 0.1 degree
Azimuth Adjustment Range	360° Continuous; $\pm 3^\circ$ fine adjustment; fine adjustment accuracy $\leq$ 0.1 degree
Mast Pipe Size	60mm OD (2.36 inch)
Wind Loading (Operational)	80 km/h
(Survival)	180 km/h
Temperature (Operational)	-40°C to 60°C
Rain (Operational)	10 mm/h
Atmospheric Conditions	Salt, Pollutants and Contaminants as encountered in coastal and industrial areas: 720 hours ASTM B117 salt spray
Humidity	0 to 100% with condensation

